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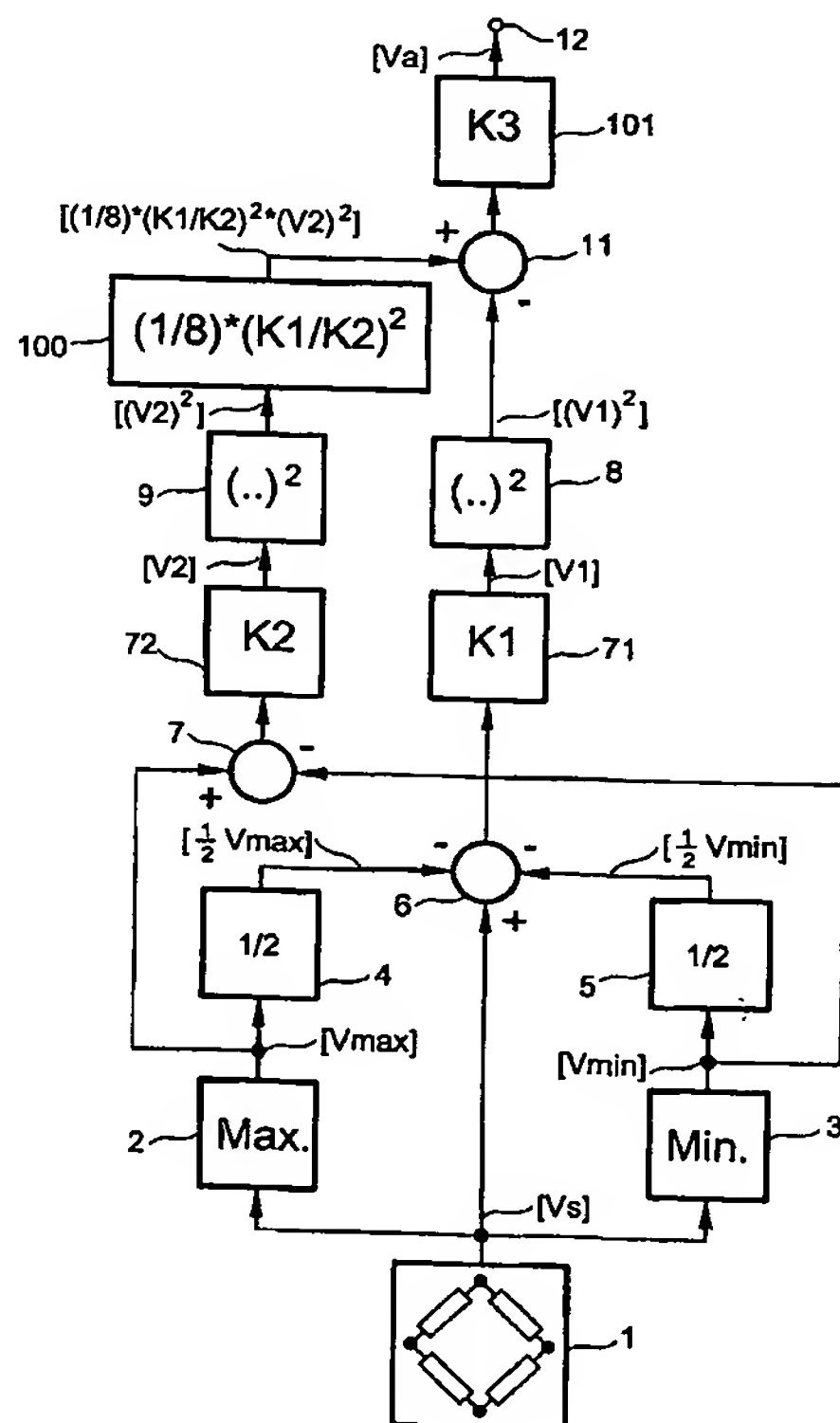
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(54) Title: **CIRCUIT ARRANGEMENT METHOD FOR OBTAINING AN OUTPUT SIGNAL, AND ROTATIONAL SPEED MEASUREMENT DEVICE COMPRISING SUCH A CIRCUIT ARRANGEMENT**



(57) Abstract: A circuit arrangement for obtaining an output signal (Va) from a signal (Vs) containing at least one alternating component comprises a signal source (1) that supplies this signal (Vs), a first peak value detection device (2) for determining a maximum value (Vmax) of the signal (Vs), a second peak value detection device (3) for determining a minimum value (Vmin) of the signal (Vs), a first signal linking device (4, 5, 6, 71) for obtaining a first resulting signal (V1) by additive linking of the signal (Vs), the maximum value (Vmax) and the minimum value (Vmin) in accordance with the rule: $V1 = K1 \cdot \{Vs - (Vmax + Vmin)/2\}$, in which K1 is a freely selectable first constant factor, a second signal linking device (7, 72) for obtaining a second resulting signal (V2) by additive linking of the maximum value (Vmax) and a minimum value (Vmin) in accordance with the rule: $V2 = (Vmax - Vmin) \cdot K2$, in which K2 is a freely selectable second factor, a first squaring device (8) for squaring the first resulting signal (V1), a second squaring device (9) for squaring the second resulting signal (V2) and a third signal linking device (100, 11, 101) for obtaining the output signal (Va) by additive linking of the squared first resulting signal $((V1)^2)$ and the squared second resulting signal $((V2)^2)$ in accordance with the rule: $Va = K3 \cdot \{(1/8) \cdot (K1/K2)^2 \cdot (V2)^2 - (V1)^2\}$, in which K3 is a freely selectable third constant factor. By means of the invention, which furthermore includes a rotational speed measurement device comprising such a circuit arrangement and also a method of obtaining an output signal, an unchanged or increased resolution of the output signal can be achieved from the signal containing an alternating component having a restricted resolution.



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